

Sheet Metal Marking Instrument Model 190

Purpose and application

Specimens made of ferrous and non-ferrous sheet metal and prepared with the Sheet Metal Marking Instrument, Model 190, provide extensive information about their behavior during subsequent deformation. The measuring grid applied to the specimen electrochemically, indicates in all parts of the work piece the direction and magnitude of the strain produced.

The degree of strain in the form of elongation or compression can be clearly seen by the distortion of the pattern of the measuring grid and can be measured numerically.

Test principle

All types of sheet metal used in forming can be provided with marking. The electrochemical application of a measuring grid takes a few seconds. If DC is used then 0.001 - 0.02 mm deep marking is obtained, whilst with AC clean forms and lines in black, brown or white are obtained on the sheet metal surface. Stencils with different patterns are available depending on the type of measurement to be made to suit the particular forming process. With measuring grids down to 2 mm and up to 8 mm diameter the strain in the material is shown up precisely, especially in the critical areas. The 0.1 mm thin, clean, uninterrupted lines obtained with our marking system and the dimensional consistency and regularity of the various marking grids provide a basis for a high accuracy in measurement.

The marking rollers transfer the measuring grid from the precision stencils evenly and quickly onto small or large surfaces.

The measuring grids themselves do not produce any stresses, surface damage or deformation of the specimen. The markings remain clearly visible on the work piece after the forming process and can be measured accurately. Light rubbing, weathering effects or corrosion caused by salt spray mist do not obliterate the measuring grid.



Marking Sheet Metal

Technical data

Power supply unit

Mains connection	230 V, 50 Hz
Current consumption	6.3 A
Input power	1.500 W
Operating voltage	18 V DC/15 V AC
Net weight	approx. 26 kg
Dimensions	Width approx. 550 mm Height approx. 340 mm Depth approx. 450 mm

Marking roller - manual

Net weight	approx. 4.5 kg
Width	approx. 270 mm

Marking roller - automatic

Net weight	approx. 14 kg
Width	approx. 235 mm

Marking stencils on carrier frame

Format	DIN A 4
Accuracy	± 1 %
Net weight	approx. 2 kg
Dimensions of Carrier frame	Width approx. 600 mm Height approx. 25 mm Depth approx. 400 mm

Ordering Information

Ord.-No.	Product Description
0108.01.31	Sheet Metal Marking Instrument, Model 190
0233.01.31	in portable metal housing incl. one set of cables with connecting clamps Marking Roller M1 necessary for applying the grid manually
0109.01.31	alternatively: Sheet Metal Marking Instrument, Model 190 as Ord.-No. 0108.01.31, but prepared for connection of an automatic marking roller
0234.01.31	Automatic Marking Roller (necessary accessory) with electric drive, infinitely variable speed, including all necessary

For further necessary accessories (at option) please refer to our price list No. 190/E.